

Page 400 of 413  
Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6462	16321	26487	4.25	0.0E+00	AF52551.1	EST_HUMAN	cn17d05.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NH7BC_cn17d05 random
6499	16358	26530	1.59	0.0E+00	AF064205.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, alternatively spliced products, exons 7 through 32 and complete cds
6499	16358	26531	1.59	0.0E+00	AF064205.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, alternatively spliced products, exons 7 through 32 and complete cds
6515	16374	26551	1.3	0.0E+00	11417342	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A), mRNA
6530	16389	26569	1.98	0.0E+00	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
6534	16392	26571	5.37	0.0E+00	BF217905.1	EST_HUMAN	601885465F1 NIH_MGC 57 Homo sapiens cDNA clone IMAGE:4103729 5'
6539	16397	26576	2.98	0.0E+00	AU129622.1	EST_HUMAN	AU129622 NT2RP2 Homo sapiens cDNA clone NT2RP2005913 5'
6550	16408	26586	6.49	0.0E+00	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
6555	16413	26590	4.97	0.0E+00	BE739870.1	EST_HUMAN	601593156F1 NIH_MGC 9 Homo sapiens cDNA clone IMAGE:3947365 5'
6555	16413	26591	4.97	0.0E+00	BE739870.1	EST_HUMAN	601593156F1 NIH_MGC 9 Homo sapiens cDNA clone IMAGE:3947365 5'
6556	16414	26592	60.88	0.0E+00	AU120424.1	EST_HUMAN	AU120424 HEMBB1 Homo sapiens cDNA clone HEMBB1000655 5'
6556	16414	26593	60.88	0.0E+00	AU120424.1	EST_HUMAN	AU120424 HEMBB1 Homo sapiens cDNA clone HEMBB1000655 5'
6574	16432	26614	1.52	0.0E+00	BE787610.1	EST_HUMAN	601481713F1 NIH_MGC 68 Homo sapiens cDNA clone IMAGE:3884258 5'
6574	16432	26615	1.52	0.0E+00	BE787610.1	EST_HUMAN	601481713F1 NIH_MGC 68 Homo sapiens cDNA clone IMAGE:3884258 5'
6622	16502	26690	1.29	0.0E+00	AA149791.1	EST_HUMAN	z01c06.r1 Stratagene colon (#937204) Homo sapiens cDNA clone IMAGE:566410 5'
6645	16525	26719	3.72	0.0E+00	BE736046.1	EST_HUMAN	601306558F1 NIH_MGC 39 Homo sapiens cDNA clone IMAGE:3639903 5'
6654	16534	26729	3.97	0.0E+00	M34872.1	NT	Human amyloid-beta protein (APP) gene, exon 11
6654	16534	26730	3.97	0.0E+00	M34872.1	NT	Human amyloid-beta protein (APP) gene, exon 11
6674	16554	26749	1.65	0.0E+00	AA397551.1	EST_HUMAN	z181b04.r1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482
6677	16557	26750	7.54	0.0E+00	AU142402.1	EST_HUMAN	G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT) ;
6688	16568		8.73	0.0E+00	BF673096.1	EST_HUMAN	AU142402 Y79AA1 Homo sapiens cDNA clone Y79AA1000277 5'
6714	16594	26763	1.96	0.0E+00	AL120124.1	EST_HUMAN	602153008F1 NIH_MGC 81 Homo sapiens cDNA clone IMAGE:4294128 5'
6714	16594	26784	1.96	0.0E+00	AL120124.1	EST_HUMAN	DKFZp761P092_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761P092 5'
6730	16610		1.31	0.0E+00	BE877693.1	EST_HUMAN	DKFZp761P092_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761P092 5'
6742	16621	26810	1.35	0.0E+00	AW500549.1	EST_HUMAN	60148254F1 NIH_MGC 69 Homo sapiens cDNA clone IMAGE:3887773 5'
						EST_HUMAN	UII-HF-BND-ak4-f01-0-UI.r1 NIH_MGC 50 Homo sapiens cDNA clone IMAGE:3077498 5'
6747	16626	26813	14.35	0.0E+00	AW157233.1	EST_HUMAN	au93b08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783799 3' similar to
6775	16654	26842	1.16	0.0E+00	BE745597.1	EST_HUMAN	TR:O60463 O60463 TYPE-2 PHOSPHATIDIC ACID PHOSPHOHYDROLASE. [1];
6775	16654	26843	1.16	0.0E+00	BE745597.1	EST_HUMAN	601578195F1 NIH_MGC 9 Homo sapiens cDNA clone IMAGE:3926998 5'
						EST_HUMAN	601578195F1 NIH_MGC 9 Homo sapiens cDNA clone IMAGE:3926998 5'

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6783	16662	26852	2.72	0.0E+00	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region, segment 1/2
6810	16689	26878	2.2	0.0E+00	BE674157.1	EST_HUMAN	7d78a04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3278862 3' similar to TR:O95793 O95793 STAUFEN PROTEIN ;
6811	16690	26879	1.36	0.0E+00	A885571.1	EST_HUMAN	wf60b10.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2429275 3' similar to SW:COGT_HUMAN P50281 MATRIX METALLOPROTEINASE-14 PRECURSOR ;
6817	16696	26887	1.31	0.0E+00	BE563650.1	EST_HUMAN	601334790F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3888655 5'
6817	16696	26888	1.31	0.0E+00	BE563650.1	EST_HUMAN	601334790F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3888655 5'
6824	16703	26897	1.44	0.0E+00	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
6824	16703	26898	1.44	0.0E+00	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
6851	16730		3.89	0.0E+00	AA398511.1	EST_HUMAN	z73a08.st Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727968 3' similar to gb:S85655 PROHIBITIN (HUMAN);
6856	16735	26928	1.45	0.0E+00	AW364874.1	EST_HUMAN	QV3-DT0045-221299-046-c07 DT0045 Homo sapiens cDNA
6856	16735	26929	1.45	0.0E+00	AW364874.1	EST_HUMAN	QV3-DT0045-221299-046-c07 DT0045 Homo sapiens cDNA
6869	16748	26942	1.21	0.0E+00	BE612586.1	EST_HUMAN	601452412F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3856179 5'
6869	16748	26943	1.21	0.0E+00	BE612586.1	EST_HUMAN	601452412F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3856179 5'
6879	16758	26956	1.25	0.0E+00	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
6879	16758	26957	1.25	0.0E+00	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
6899	16778		2.01	0.0E+00	BE890797.1	EST_HUMAN	601431238F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916569 5'
6913	16791	26984	2.4	0.0E+00	4758695	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
6913	16791	26985	2.4	0.0E+00	4758695	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
6955	16833	27026	2.85	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
6955	16833	27027	2.85	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
6955	16833	27028	2.85	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
6993	16870		1.36	0.0E+00	AW513513.1	EST_HUMAN	xo46e01.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2707032 3' similar to gb:M14123_cds4 RETROVIRUS-RELATED POL POLYPROTEIN (HUMAN);
6995	16872	27063	3.64	0.0E+00	D52650.1	EST_HUMAN	HUM084C02B Clontech human fetal brain polyA+ mRNA (#6535) Homo sapiens cDNA clone GEN-084C02 5'
7011	16888	27081	4.46	0.0E+00	BE378495.1	EST_HUMAN	601236488F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608709 5'
7015	16892	27083	1.31	0.0E+00	AA410545.1	EST_HUMAN	z32e04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:724062 5'
7016	16893		4.32	0.0E+00	BF313946.1	EST_HUMAN	601900571F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4129744 5'
7021	16898	27088	1.41	0.0E+00	AW139673.1	EST_HUMAN	UI-H-B11-adr-e-12-0-J1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717687 3'
7021	16898	27089	1.41	0.0E+00	AW139673.1	EST_HUMAN	UI-H-B11-adr-e-12-0-J1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717687 3'
7038	16915	27104	2.39	0.0E+00	BE260272.1	EST_HUMAN	601150051F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502836 5'
7040	16917	27106	1.83	0.0E+00	BF700185.1	EST_HUMAN	602127684F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'

Page 402 of 413  
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7040	16917	27107	1.83	0.0E+00	BF700165.1	EST_HUMAN	602127664F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'
7040	16917	27108	1.83	0.0E+00	BF700165.1	EST_HUMAN	602127664F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'
7069	16946	27137	6.35	0.0E+00	AA962527.1	EST_HUMAN	or80g02.s1 NCL_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1602194 3' similar to gb:M36072 60S RIBOSOMAL PROTEIN L7A (HUMAN);
7073	16950	27142	3.54	0.0E+00	10947037	NT	Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 1, mRNA
7073	16950	27143	3.54	0.0E+00	10947037	NT	Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 1, mRNA
7088	16965	27159	1.28	0.0E+00	Y11107.3	NT	Homo sapiens ITGB4 gene for integrin beta 4 subunit, exons 3-41
7095	16972		1.45	0.0E+00	AV718377.1	EST_HUMAN	AV718377 FHTB Homo sapiens cDNA clone FHTBAAF11 5'
7099	16976	27169	3.64	0.0E+00	AW337277.1	EST_HUMAN	xw73c07.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2833644 3' similar to gb:X53587 INTEGRIN BETA-4 SUBUNIT PRECURSOR (HUMAN);
7102	16979	27171	1.57	0.0E+00	AU124051.1	EST_HUMAN	AU124051 NT2RM2 Homo sapiens cDNA clone NT2RM2001575 5'
7147	17024	27218	2.64	0.0E+00	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
7148	17025	27219	4.41	0.0E+00	AW592233.1	EST_HUMAN	ht4a09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2935096 3'
7148	17025	27220	4.41	0.0E+00	AW592233.1	EST_HUMAN	ht4a09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2935096 3'
7176	17053	27241	2.84	0.0E+00	AL040428.1	EST_HUMAN	DKFZp434C1814.s1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434C1814 3'
7176	17053	27242	2.84	0.0E+00	AL040428.1	EST_HUMAN	DKFZp434C1814.s1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434C1814 3'
7177	17054	27243	1.17	0.0E+00	AF133901.1	NT	Homo sapiens killer inhibitory receptor 2-2-1 (KIR221) and killer inhibitory receptor 2-2-2 (KIR222) genes, partial cds
7178	17055	27244	18.6	0.0E+00	AB040946.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
7198	17075	27261	3.97	0.0E+00	11422857	NT	Homo sapiens tumor protein p73 (TP73), mRNA
7204	17081	27268	1.25	0.0E+00	K01241.1	NT	Human Ig rearranged H-chain epsilon-3 pseudogene, constant region
7207	17084	27272	2.65	0.0E+00	AB020630.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
7207	17084	27273	2.65	0.0E+00	AB020630.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
7210	17087	27277	1.96	0.0E+00	AV660739.1	EST_HUMAN	AV660739 GLC Homo sapiens cDNA clone GLCGKG12 3'
7213	17090	27280	3.43	0.0E+00	7706638	NT	Homo sapiens polycystin-L (PKDL), mRNA
7231	17108	27298	3.86	0.0E+00	BE315402.1	EST_HUMAN	601141119F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
7231	17108	27299	3.86	0.0E+00	BE315402.1	EST_HUMAN	601141119F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
7241	17118	27313	1.91	0.0E+00	X14766.1	NT	Human mRNA for GABA-A receptor, alpha 1 subunit
7250	17127	27320	2.12	0.0E+00	A1954607.1	EST_HUMAN	wg34a12.x1 NCL_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2473150 3' similar to SW:MGB3_HUMAN O15480 MELANOMA-ASSOCIATED ANTIGEN B3 ;
7254	17131	27324	4.49	0.0E+00	9256595	NT	Homo sapiens protocadherin alpha 8 (PCDH8), mRNA
7263	17140	27333	1.54	0.0E+00	AW955311.1	EST_HUMAN	EST370381 IMAGE:2935096, IMAGE:2935096 Homo sapiens cDNA
7269	17146	27340	1.49	0.0E+00	9635487	NT	Human endogenous retrovirus, complete genome
7280	17157	27352	6.88	0.0E+00	11436995	NT	Homo sapiens MAP-kinase activating death domain (MADD), mRNA

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7290	17166	27365	1.44	0.0E+00	AB011150.1	NT	Homo sapiens mRNA for KIAA0578 protein, partial cds
7291	17167	27366	2.56	0.0E+00	BE794823.1	EST_HUMAN	601589294F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943463 5'
7298	17174	27374	1.24	0.0E+00	BE883843.1	EST_HUMAN	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911986 5'
7298	17174	27375	1.24	0.0E+00	BE883843.1	EST_HUMAN	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911986 5'
7308	17184	27383	1.6	0.0E+00	AA344601.1	EST_HUMAN	EST50505 Gall bladder 1 Homo sapiens cDNA 5' end
7308	17184	27384	1.6	0.0E+00	AA344601.1	EST_HUMAN	EST50505 Gall bladder 1 Homo sapiens cDNA 5' end
7360	17227	27426	1.38	0.0E+00	BE207063.1	EST_HUMAN	ba09f05.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823873 5' similar to gb:135049 Mus musculus Bcl-xL mRNA, complete cds (MOUSE);
7360	17227	27427	1.38	0.0E+00	BE207063.1	EST_HUMAN	ba09f05.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823873 5' similar to gb:135049 Mus musculus Bcl-xL mRNA, complete cds (MOUSE);
7368	17346	27551	2.71	0.0E+00	BF348013.1	EST_HUMAN	602023150F1 NCL_CGAP_Bn67 Homo sapiens cDNA clone IMAGE:4158300 5'
7363	17252	27457	3	0.0E+00	BE712515.1	EST_HUMAN	QV2-H1T0698-230700-282-508 HT0698 Homo sapiens cDNA
7406	17273	27479	11.81	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120_r1_434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L0120 5'
7425	17292	27503	1.27	0.0E+00	A088043.1	EST_HUMAN	ow60h01.x1 Soares NSF_F8_gw_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:1651249 3' similar to TR:Q14677 KIAA0171 PROTEIN.;
7429	16442	26628	2.06	0.0E+00	11560161	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
7429	16442	26629	2.06	0.0E+00	11560161	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
7431	16444	26632	8.86	0.0E+00	AL290909.1	EST_HUMAN	qm09a06.x1 NCL_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1881298 3' similar to SW:RL2B_HUMAN P29316 60S RIBOSOMAL PROTEIN L23A.;
7431	16444	26633	8.86	0.0E+00	AL290909.1	EST_HUMAN	qm09a06.x1 NCL_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1881298 3' similar to SW:RL2B_HUMAN P29316 60S RIBOSOMAL PROTEIN L23A.;
7432	16445	26634	1.69	0.0E+00	AW953836.1	EST_HUMAN	EST366026 MAGC resequences, MAGC Homo sapiens cDNA
7450	17259	27464	3.92	0.0E+00	AF153466.1	NT	Homo sapiens polycystic kidney disease 2-like protein (PKD2L) gene, exon 8
7461	17321	27529	4.9	0.0E+00	BE255829.1	EST_HUMAN	601109942F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350722 5'
7463	17323	27529	1.37	0.0E+00	BE781382.1	EST_HUMAN	601466828F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870007 5'
7463	17323	27530	1.37	0.0E+00	BE781382.1	EST_HUMAN	601466828F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870007 5'
7464	17324	27531	7.21	0.0E+00	AW163779.1	EST_HUMAN	au86c04.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783142 5' similar to gb:M36072 60S RIBOSOMAL PROTEIN L7A (HUMAN);
7475	17335	27541	2.85	0.0E+00	BE263191.1	EST_HUMAN	601145054F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3160477 5'
7488	17358	27562	3.98	0.0E+00	C06158.1	EST_HUMAN	C06158 Human pancreatic islet Homo sapiens cDNA clone hbc5605
7488	17358	27563	3.98	0.0E+00	C06158.1	EST_HUMAN	C06158 Human pancreatic islet Homo sapiens cDNA clone hbc5605
7490	17360	27566	3.22	0.0E+00	BE746215.1	EST_HUMAN	601578683F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3927548 5'
7499	17369	27574	1.93	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
7499	17369	27575	1.93	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA

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7499	17369	27576	1.93	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
7514	17302	27509	1.47	0.0E+00	BE000549.1	EST_HUMAN	601673425F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3966238 5'
7530	17381	27591	2.59	0.0E+00	AF019084.1	NT	Homo sapiens keratin 2e (KRT2E) gene, complete cds
7530	17381	27592	2.59	0.0E+00	AF019084.1	NT	Homo sapiens keratin 2e (KRT2E) gene, complete cds
7548	17399	27612	1.47	0.0E+00	BE082977.1	EST_HUMAN	RC2-BT0642-130300-017-g01 BT0642 Homo sapiens cDNA
7559	17410	27626	1.76	0.0E+00	AW500293.1	EST_HUMAN	UHF-BN0-akg-b-12-0-UI.1 NIH_MGC 50 Homo sapiens cDNA clone IMAGE:3076943 5'
7559	17410	27627	1.76	0.0E+00	AW500293.1	EST_HUMAN	UHF-BN0-akg-b-12-0-UI.1 NIH_MGC 50 Homo sapiens cDNA clone IMAGE:3076943 5'
7563	17414	27629	1.25	0.0E+00	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
7563	17414	27630	1.25	0.0E+00	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
7580	17431	27645	2.45	0.0E+00	AW500526.1	EST_HUMAN	UHF-BN0-akg-c-07-0-UI.1 NIH_MGC 50 Homo sapiens cDNA clone IMAGE:3077384 5'
7607	17458	27673	1.34	0.0E+00	AF009668.1	NT	Multiple sclerosis associated retrovirus polyprotein (pol) mRNA, partial cds
7621	17472	27691	2.56	0.0E+00	S78466.1	NT	AlGF=androgen-induced growth factor AlGF [human, placenta, Genomic/mRNA, 498 nt, segment 5 of 5]
7621	17472	27692	2.56	0.0E+00	S78466.1	NT	AlGF=androgen-induced growth factor AlGF [human, placenta, Genomic/mRNA, 498 nt, segment 5 of 5]
7622	17473	27693	2.57	0.0E+00	BE563320.1	EST_HUMAN	601334603F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688680 5'
7630	17481	27701	1.62	0.0E+00	AW363135.1	EST_HUMAN	CM2-CT0311-301199-043-h11 CT0311 Homo sapiens cDNA
7650	17500	27722	2.17	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
7650	17500	27723	2.17	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
7659	17509	27734	7.73	0.0E+00	BE740490.1	EST_HUMAN	601595558F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3949383 5'
7659	17509	27735	7.73	0.0E+00	BE740490.1	EST_HUMAN	601595558F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3949383 5'
7666	17516	27743	1.76	0.0E+00	7662067	NT	Homo sapiens KIAA0345 gene product (KIAA0345), mRNA
7682	17532	27756	2.22	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
7683	17533	27757	1.86	0.0E+00	AF152308.1	NT	Homo sapiens protodactherin alpha 12 (PCDH-alpha12) mRNA, complete cds
7701	17551	27776	2.72	0.0E+00	AF009220.1	NT	Homo sapiens leucocyte immunoglobulin-like receptor-1 mRNA, complete cds
7701	17551	27777	2.72	0.0E+00	AF009220.1	NT	Homo sapiens leucocyte immunoglobulin-like receptor-1 mRNA, complete cds
7708	17568	27784	1.65	0.0E+00	BF092898.1	EST_HUMAN	MR4-TN0114-110900-101-e04 TN0114 Homo sapiens cDNA
7720	17570	27795	2.44	0.0E+00	BE280793.1	EST_HUMAN	601155227F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138798 5'
7728	17578	27800	1.74	0.0E+00	AW236269.1	EST_HUMAN	xn72b01.x1 NCL CGAP_CML1 Homo sapiens cDNA clone IMAGE:2699977 3' similar to gb:X02152_cds1 L-
7736	17586	27810	1.91	0.0E+00	11427235	NT	LACTATE DEHYDROGENASE M CHAIN (HUMAN);
7753	17603	27826	5.98	0.0E+00	AU143673.1	EST_HUMAN	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
							AU143673 Y79AA1 Homo sapiens cDNA clone Y79AA1002307 5'

Table 4

## Single Exon Probes Expressed in Heart

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7753	17603	27827	5.98	0.0E+00	AU143673.1	EST_HUMAN	AU143673 Y79AA1 Homo sapiens cDNA clone Y79AA1002307 5'
7756	17606	27830	7.52	0.0E+00	AF072408.1	NT	Homo sapiens killer cell inhibitory receptor KIRCI gene, exons 2, 3, and 4
7758	17608	27832	2.48	0.0E+00	11421001	NT	Homo sapiens HEF like Protein (HEFL), mRNA
7758	17608	27833	2.48	0.0E+00	11421001	NT	Homo sapiens HEF like Protein (HEFL), mRNA
7755	17635	27868	2.96	0.0E+00	AU136637.1	EST_HUMAN	AU136637 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'
7755	17635	27869	2.96	0.0E+00	AU136637.1	EST_HUMAN	AU136637 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'
7795	17645	27879	2.13	0.0E+00	AJ295844.1	NT	Homo sapiens partial RANBP7 gene for RANBP7/importin7 and partial ZNF143 gene
7795	17645	27880	2.13	0.0E+00	AJ295844.1	NT	Homo sapiens partial RANBP7 gene for RANBP7/importin7 and partial ZNF143 gene
7804	17654	27892	4.01	0.0E+00	AA196387.1	EST_HUMAN	zp97h11.1 Striatogene muscle 937209 Homo sapiens cDNA clone IMAGE:628197 5'
7823	17673	27915	1.17	0.0E+00	AA131248.1	EST_HUMAN	z31f01.1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:503545 5'
7823	17673	27916	1.17	0.0E+00	AA131248.1	EST_HUMAN	z31f01.1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:503545 5'
7842	17692	27937	1.46	0.0E+00	AF179308.1	NT	Homo sapiens KIF4 (KIF4) mRNA, complete cds
7865	17715	27959	3.45	0.0E+00	BE730772.1	EST_HUMAN	601570712F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3845403 5'
7865	17715	27960	3.45	0.0E+00	BE730772.1	EST_HUMAN	601570712F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3845403 5'
7892	17742	27985	1.24	0.0E+00	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
7897	17747	27987	1.84	0.0E+00	AB029290.1	NT	Homo sapiens mRNA for actin binding protein ABP620, complete cds
7903	17753	27991	5.19	0.0E+00	AB006590.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds
7903	17753	27992	5.19	0.0E+00	AB006590.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds
7904	17754	27993	3.27	0.0E+00	AA194770.1	EST_HUMAN	zq06h11.1 Striatogene muscle 937209 Homo sapiens cDNA clone IMAGE:628965 5' similar to TR:G407097
7905	17755	27994	5.43	0.0E+00	BF340331.1	EST_HUMAN	G407097 165KD PROTEIN, ;
7905	17755	27995	5.43	0.0E+00	BF340331.1	EST_HUMAN	602037045F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4184939 5'
7946	17796	28036	1.37	0.0E+00	T03078.1	EST_HUMAN	602037045F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4184939 5'
7972	17822	28065	2.35	0.0E+00	BF436218.1	EST_HUMAN	FB23A4 Fetal brain, Striatogene Homo sapiens cDNA clone FB23A4 3'end
7973	17823		2.05	0.0E+00	AV654765.1	EST_HUMAN	nab45e12.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3265271 3'
7982	17832	28072	3.55	0.0E+00	AW517960.1	EST_HUMAN	AV654765 GLC Homo sapiens cDNA clone GLC02C07 3'
7984	17834	28074	6.06	0.0E+00	BE549213.1	EST_HUMAN	xu74b01.x1 NCI_CGAP_Kid8 Homo sapiens cDNA clone IMAGE:2807401 3' similar to gb:M69066 MOESIN (HUMAN);
8001	17851	28092	1.65	0.0E+00	BE781742.1	EST_HUMAN	601078764F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3464703 5'
8008	17858	28101	2.23	0.0E+00	BE082720.1	EST_HUMAN	601467419F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870700 5'
8008	17858	28102	2.23	0.0E+00	BE082720.1	EST_HUMAN	RC2-BT0642-150200-012-d03 BT0642 Homo sapiens cDNA
8015	17865	28111	1.69	0.0E+00	BE743215.1	EST_HUMAN	RC2-BT0642-150200-012-d03 BT0642 Homo sapiens cDNA
8015	17865	28112	1.69	0.0E+00	BE743215.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835198 5'
8032	17924	28170	2.33	0.0E+00	AV711075.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835198 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8032	17924	28171	2.33	0.0E+00	AV711075.1	EST_HUMAN	AV711075 Cu Homo sapiens cDNA clone CuAAKG05 5'
8034	17926		6.11	0.0E+00	AW813783.1	EST_HUMAN	RC3-ST0197-120200-015-a03 ST0197 Homo sapiens cDNA
8040	17931	28178	6.43	0.0E+00	AW963663.1	EST_HUMAN	EST376636 MAGE resequences, MAGE Homo sapiens cDNA
8051	17942	28191	2.5	0.0E+00	11431124	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
8051	17942	28192	2.5	0.0E+00	11431124	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
8054	17945	28195	1.99	0.0E+00	AW057621.1	EST_HUMAN	wy61f09.x1 Soares_NSF_F8_gw_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2553065 3' similar to TR:Q60566 Q60566 VDX;
8059			1.92	0.0E+00	BE243270.1	EST_HUMAN	TCAAP3D0917 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP0917
8060	17951	28200		0.0E+00	AI652239.1	EST_HUMAN	wb28a12.x1 NCL CGAP_GC6 Homo sapiens cDNA clone IMAGE:2306974 3' similar to contains element MSR1 MSR1 repetitive element;
8060	17951	28202	4.86	0.0E+00	AI652239.1	EST_HUMAN	wb28a12.x1 NCL CGAP_GC6 Homo sapiens cDNA clone IMAGE:2306974 3' similar to contains element MSR1 MSR1 repetitive element;
8068	17959	28209	2.91	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
8068	17959	28210	2.91	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
8081	17972	28221	2.01	0.0E+00	AW404795.1	EST_HUMAN	U1HF-BL0-aom-04-0-U1.r1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3059383 5'
8084	17975	28224	4.8	0.0E+00	11424829	NT	Homo sapiens hypothetical protein FLJ20079 (FLJ20079), mRNA
8085	17976	28225	9.16	0.0E+00	4504536	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E), mRNA
8085	17976	28226	9.16	0.0E+00	4504536	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E), mRNA
8086	17977	28227	2.73	0.0E+00	AI991827.1	EST_HUMAN	wu32b06.x1 Soares_Dieckgraefe_colon_NHCD Homo sapiens cDNA clone IMAGE:2521715 3'
8089	17980	28231	3.04	0.0E+00	BE882109.1	EST_HUMAN	601505204F2 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3906865 5'
8093	17984	28233	10.56	0.0E+00	BE891630.1	EST_HUMAN	601434522F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919636 5'
8095	17986	28234	22.36	0.0E+00	8923939	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
8095	17986	28235	22.36	0.0E+00	8923939	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
8110	18000	28247	1.91	0.0E+00	BE903304.1	EST_HUMAN	601674332F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3957343 5'
8113	15448	25515	4.05	0.0E+00	AA195905.1	EST_HUMAN	zp95b11.r1 Stragene muscle 937209 Homo sapiens cDNA clone IMAGE:627933 5' similar to gb:X03740 MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
8134	18022	28269	4.69	0.0E+00	BE793498.1	EST_HUMAN	60158829F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943015 5'
8143	18031	28277	6.8	0.0E+00	AV727362.1	EST_HUMAN	AV727362 HTC Homo sapiens cDNA clone HTCAQH06 5'
8143	18031	28278	6.8	0.0E+00	AV727362.1	EST_HUMAN	AV727362 HTC Homo sapiens cDNA clone HTCAQH06 5'
8156	18044	28296	17.96	0.0E+00	AW516055.1	EST_HUMAN	xy04g10.x1 NCL CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2852226 3' similar to gb:M60854 40S RIBOSOMAL PROTEIN S16 (HUMAN);
8161	18049	28301	2.17	0.0E+00	AU135741.1	EST_HUMAN	AU135741 PLACE1 Homo sapiens cDNA clone PLACE1002794 5'



Page 407 of 413  
Table 4

## Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8166	18054	28304	3.45	0.0E+00	AW593333.1	EST_HUMAN	hg13d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;
8166	18054	28305	3.45	0.0E+00	AW593333.1	EST_HUMAN	hg13d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;
8166	18054	28306	3.45	0.0E+00	AW593333.1	EST_HUMAN	hg13d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;
8168	18056	28307	1.82	0.0E+00	Z34897.1	NT	H.sapiens mRNA for H1 histamine receptor
8169	18057	28308	2.8	0.0E+00	F13069.1	EST_HUMAN	HSC3C031 normalized Infant brain cDNA Homo sapiens cDNA clone c-3ic03
8176	18064	28313	2.12	0.0E+00	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
8191	18077	28328	2.92	0.0E+00	AW338094.1	EST_HUMAN	xw66f01.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2832985 3' similar to gb:X17115 IG MU CHAIN C REGION (HUMAN);
8192	18078	28329	5.64	0.0E+00	AW451230.1	EST_HUMAN	UI-H-B13-ah-a-01-0-UJ.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736649 3'
8194	18078	28330	5.64	0.0E+00	AW451230.1	EST_HUMAN	UI-H-B13-ah-a-01-0-UJ.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736649 3'
8194	10179		14.21	0.0E+00	4506632	NT	Homo sapiens ribosomal protein L31 (RPL31) mRNA
8196	18081	28332	2.03	0.0E+00	AB014567.1	NT	Homo sapiens mRNA for KIAA0667 protein, partial cds
8208	18092	28346	2.35	0.0E+00	BE298449.1	EST_HUMAN	601119248F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029219 5'
8224	18106	28359	1.88	0.0E+00	AB011117.1	NT	Homo sapiens mRNA for KIAA0545 protein, partial cds
8227	18109	28363	59.52	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
8240	18120	28371	3.47	0.0E+00	BE792155.1	EST_HUMAN	601582046F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3936539 5'
8241	18121		25.37	0.0E+00	BF684061.1	EST_HUMAN	602141405F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302492 5'
8244	18124	28374	6.16	0.0E+00	AU118386.1	EST_HUMAN	AU118386 HEMBA1 Homo sapiens cDNA clone HEMBA1003486 5'
8245	18125					EST_HUMAN	xn72b01.x1 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2699977 3' similar to gb:X02152 cds1 L-LACTATE DEHYDROGENASE M CHAIN (HUMAN);
8250	18130	28378	2.72	0.0E+00	AW236269.1	EST_HUMAN	qf43c03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752772 3'
8250	18130	28379	6.77	0.0E+00	A1149809.1	EST_HUMAN	qf43c03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752772 3'
8251	18131	28380	3.05	0.0E+00	AW391937.1	EST_HUMAN	QV4-ST0234-121199-032-b06 ST0234 Homo sapiens cDNA
8262	18142		4.62	0.0E+00	AU116908.1	EST_HUMAN	AU116908 HEMBA1 Homo sapiens cDNA clone HEMBA1000255 5'
8265	18145	28386	18.63	0.0E+00	11424726	NT	Homo sapiens insulin receptor (INSR), mRNA
8271	18151	28392	1.78	0.0E+00	AW804516.1	EST_HUMAN	QV0-UM0093-170400-191-d06 UM0093 Homo sapiens cDNA
8271	18151	28393	1.78	0.0E+00	AW804516.1	EST_HUMAN	QV0-UM0093-170400-191-d06 UM0093 Homo sapiens cDNA
8272	18152	28394	2.14	0.0E+00	BF340308.1	EST_HUMAN	602037014F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4184979 5'
8273	18153	28395	49.5	0.0E+00	BE261209.1	EST_HUMAN	601148357F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3163310 5'
8282	18161	28403	2.53	0.0E+00	U50326.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 15-17
8283	18162	28404	68.7	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene



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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8287	18166	28409	3.52	0.0E+00	BE773036.1	EST_HUMAN	RC1-FT0134-170700-012-07 FT0134 Homo sapiens cDNA
8287	18166	28410	3.52	0.0E+00	BE773036.1	EST_HUMAN	RC1-FT0134-170700-012-07 FT0134 Homo sapiens cDNA
8307	18184	28431	24.55	0.0E+00	AA740782.1	EST_HUMAN	ob32e07.s1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1325412 3' similar to contains element MSR1 repetitive element;
8313	18190	28439	3.12	0.0E+00	AF252303.1	NT	Homo sapiens signaling lymphocytic activation molecule (SLAM) gene, exon 2
8326	18203	28452	149.55	0.0E+00	C05089.1	EST_HUMAN	C05089 Human heart cDNA (YNakamura) Homo sapiens cDNA clone 3NHC4817
8333	18210	28460	2.17	0.0E+00	AA746375.1	EST_HUMAN	oa56h01.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1309009 5'
8333	18210	28461	2.17	0.0E+00	AA746375.1	EST_HUMAN	oa56h01.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1309009 5'
8341	18218	28470	2.41	0.0E+00	M78448.1	EST_HUMAN	EST00596 Fetal brain, Striatogene (cat#936206) Homo sapiens cDNA clone HFBCC26
8341	18218	28471	2.41	0.0E+00	M78448.1	EST_HUMAN	EST00596 Fetal brain, Striatogene (cat#936206) Homo sapiens cDNA clone HFBCC26
8344	18221	28472	1.82	0.0E+00	BF33625.1	EST_HUMAN	QV2-HT0698-020800-295-d07 HT0698 Homo sapiens cDNA
8345	18222	28473	8.08	0.0E+00	AL157608.1	EST_HUMAN	DKFp761J2116_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFp761J2116 5'
8357	18234	28482	10.53	0.0E+00	AU116988.1	EST_HUMAN	AU116988 HEMBA1 Homo sapiens cDNA clone HEMBA1000424 5'
8375	18252	28503	1.86	0.0E+00	BF368553.1	EST_HUMAN	IL3-NT0104-200500-143-A07 NT0104 Homo sapiens cDNA
8395	18271	28523	3.78	0.0E+00	BE182360.1	EST_HUMAN	PM0-HT0645-060500-002-E05 HT0645 Homo sapiens cDNA
8395	18271	28524	3.78	0.0E+00	BE182360.1	EST_HUMAN	PM0-HT0645-060500-002-E05 HT0645 Homo sapiens cDNA
8405	18281	28533	3.46	0.0E+00	BE896423.1	EST_HUMAN	601439092F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924142 5'
8410	18285	28539	1.74	0.0E+00	AW500307.1	EST_HUMAN	UI-HF-BN0-akg-d-02-0-J1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077019 5'
8410	18285	28540	1.74	0.0E+00	AW500307.1	EST_HUMAN	UI-HF-BN0-akg-d-02-0-J1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077019 5'
8442	18316	28574	4	0.0E+00	BE897953.1	EST_HUMAN	601440446F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3925403 5'
8443	18317	28575	1.96	0.0E+00	AI459545.1	EST_HUMAN	ac86g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'
8443	18317	28576	1.96	0.0E+00	AI459545.1	EST_HUMAN	ac86g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'
8455	18328	28587	88.73	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #836215, Homo sapiens cDNA clone 77E12
8455	18328	28588	88.73	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #836215, Homo sapiens cDNA clone 77E12
8480	18353	28618	3.88	0.0E+00	4758827	NT	Homo sapiens neurexin III (NRXN3) mRNA
8481	18354	28619	4.54	0.0E+00	BF206561.1	EST_HUMAN	601870902F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4101433 5'
8483	18356	28620	16	0.0E+00	AW207734.1	EST_HUMAN	UI-H-BI2-age-h-01-0-J1.s1 NCI_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2724312 3'
8484	18357	28621	3.77	0.0E+00	AW604975.1	EST_HUMAN	RC0-CT0380-210100-032-c10 CT0380 Homo sapiens cDNA
8484	18357	28622	3.77	0.0E+00	AW604975.1	EST_HUMAN	RC0-CT0380-210100-032-c10 CT0380 Homo sapiens cDNA
8488	18361	28625	6.91	0.0E+00	AB018260.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
8488	18361	28626	6.91	0.0E+00	AB018260.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds

Page 409 of 413  
Table 4  
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8490	18363	28628	2.59	0.0E+00	BE206846.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-55KDA-ASSOCIATED PROTEIN ;
8490	18363	28629	2.59	0.0E+00	BE206846.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-55KDA-ASSOCIATED PROTEIN ;
8511	18383	28648	2.85	0.0E+00	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
8514	18386	28651	2.01	0.0E+00	BF093687.1	EST_HUMAN	QV0-UM0091-120900-385-b12 UM0091 Homo sapiens cDNA
8518	18390	28653	2.9	0.0E+00	BE148076.1	EST_HUMAN	RC3-HT0230-040500-110-h04 HT0230 Homo sapiens cDNA
8518	18390	28654	2.9	0.0E+00	BE148076.1	EST_HUMAN	RC3-HT0230-040500-110-h04 HT0230 Homo sapiens cDNA
8626	18398	28665	6.47	0.0E+00	AA195905.1	EST_HUMAN	zp95b11.r1 Stragene muscle 937209 Homo sapiens cDNA clone IMAGE:627933 5' similar to gb:X03740 MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
8646	18418	28687	4.47	0.0E+00	BF507876.1	EST_HUMAN	UI-H-B14-ack-b-10-0-J1.st NCL_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085026 3'
8646	18418	28688	4.47	0.0E+00	BF507876.1	EST_HUMAN	UI-H-B14-ack-b-10-0-J1.st NCL_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085026 3'
8653	18423	28692	2.16	0.0E+00	AU135170.1	EST_HUMAN	AU135170 PLACE1 Homo sapiens cDNA clone PLACE1001381 5'
8657	18427	28696	5.62	0.0E+00	BE876401.1	EST_HUMAN	601486828F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3889207 5'
8657	18427	28697	5.62	0.0E+00	BE876401.1	EST_HUMAN	601486828F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3889207 5'
8666	18435		10.32	0.0E+00	BF240536.1	EST_HUMAN	601875630F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4099710 5'
8671	18445	28713	3.05	0.0E+00	AB037737.1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
8671	18445	28714	3.05	0.0E+00	AB037737.1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
8681	18449	28717	3.49	0.0E+00	11430868	NT	Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA
8681	18449	28718	3.49	0.0E+00	11430868	NT	Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA
8696	18463	28734	6.1	0.0E+00	4503544	NT	Homo sapiens eukaryotic translation initiation factor 5A (EIF5A) mRNA
8603	18470	28741	2.49	0.0E+00	BF576267.1	EST_HUMAN	602134132F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4289502 5'
8605	18472	28744	5.44	0.0E+00	AW328173.1	EST_HUMAN	dfo4g06.x1 NIH_MGC_3 Homo sapiens cDNA clone IMAGE:2847177 5'
8608	18475		120.65	0.0E+00	M55083.1	NT	Human gamma actin-like pseudogene, complete cds
8612	18479	28750	3.18	0.0E+00	AI660968.1	EST_HUMAN	wf20e11.x1 Soares Dieckgrafe_colon_NHUC Homo sapiens cDNA clone IMAGE:2351180 3' similar to gb:M87789 IG GAMMA-1 CHAIN C REGION (HUMAN);
8614	18481	28752	3.64	0.0E+00	BF305996.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
8614	18481	28753	3.64	0.0E+00	BF305996.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
8620	18486	28758	26.88	0.0E+00	BF362462.1	EST_HUMAN	QV2-NN0054-230800-333-e04 NN0054 Homo sapiens cDNA
8639	18504		4.07	0.0E+00	BE897051.1	EST_HUMAN	601435605F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924577 5'
8648	18512	28793	2.89	0.0E+00	8923698	NT	Homo sapiens golgin-like protein (GLP), mRNA
8650	18514		2.24	0.0E+00	BF207662.1	EST_HUMAN	601861947F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:4081715 5'
8661	18550	28833	4.61	0.0E+00	BE206846.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-55KDA-ASSOCIATED PROTEIN ;

Page 410 of 413  
Table 4  
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8661	18550	28834	4.61	0.0E+00	BE206846.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 Q76022 E1B-55KDA-ASSOCIATED PROTEIN.;
8663	18552	28836	3	0.0E+00	AW753028.1	EST_HUMAN	QV0-CT025-101299-071-f06 CT0225 Homo sapiens cDNA
8668	18557		2.36	0.0E+00	AA588707.1	EST_HUMAN	nl42c08.s1 NCL_CGAP_Pr4 Homo sapiens cDNA clone IMAGE:2464094 3'
8669	15148	24915	5	0.0E+00	AI934954.1	EST_HUMAN	ACTININ 1, CYTOSKELETAL ISOFORM (HUMAN);
8670	18558	28842	7.41	0.0E+00	AW327895.1	EST_HUMAN	wp06g08.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2464094 3'
8700	18518	28800	4.73	0.0E+00	BE185656.1	EST_HUMAN	dr02b08.x1 NIH_MGC_3 Homo sapiens cDNA clone IMAGE:2846919 5'
8712	18529	28812	4.74	0.0E+00	AL046540.1	EST_HUMAN	IL5-HT0731-020500-077-f05 HT0731 Homo sapiens cDNA
8712	18529	28813	4.74	0.0E+00	AL046540.1	EST_HUMAN	DKFZp434G178_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G178 5'
8722	18539	28823	12.53	0.0E+00	AI923116.1	EST_HUMAN	DKFZp434G178_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G178 5'
8724	18580	28863	4.18	0.0E+00	AA760913.1	EST_HUMAN	wn83g03.x1 NCL_CGAP_U11 Homo sapiens cDNA clone IMAGE:2452468 3' similar to gb:S37431 LAMININ-RECEPTOR (HUMAN);
8724	18580	28864	4.18	0.0E+00	AA760913.1	EST_HUMAN	nz11c07.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1287468 3' similar to TR:Q13686
8728	18584	28869	2.33	0.0E+00	BE910546.1	EST_HUMAN	Q13686 ALKB HOMOLOG PROTEIN.;
8737	17886	28130	5.67	0.0E+00	BE676347.1	EST_HUMAN	nz11c07.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1287468 3' similar to TR:Q13686
8772	18589	28875	2.78	0.0E+00	L39891.1	NT	Q13686 ALKB HOMOLOG PROTEIN.;
8772	18589	28876	2.78	0.0E+00	L39891.1	NT	601501090F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902926 5'
8784	18599	28888	4.02	0.0E+00	AU138211.1	EST_HUMAN	7127H12.x1 NCL_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3295519 3' similar to TR:O00409 O00409
8797	18611	28902	1.91	0.0E+00	BE622317.1	EST_HUMAN	CHECKPOINT SUPPRESSOR 1.;
8827	18640	28924	10.47	0.0E+00	BE748899.1	EST_HUMAN	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
8827	18640	28925	10.47	0.0E+00	BE748899.1	EST_HUMAN	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
8837	18650	28937	2.97	0.0E+00	AU141882.1	EST_HUMAN	AU138211 PLACE1 Homo sapiens cDNA clone PLACE1008077 5'
8837	18650	28938	2.97	0.0E+00	AU141882.1	EST_HUMAN	601441096F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916270 5'
8840	18653	28941	2.35	0.0E+00	AW006022.1	EST_HUMAN	601572186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:38939012 3'
8843	19474	28943	3.84	0.0E+00	BF002333.1	EST_HUMAN	601572186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:38939012 3'
8861	18673	28962	3.19	0.0E+00	AW387776.1	EST_HUMAN	AU141882 THYRO1 Homo sapiens cDNA clone THYRO1001398 5'
8861	18673	28963	3.19	0.0E+00	AW387776.1	EST_HUMAN	AU141882 THYRO1 Homo sapiens cDNA clone THYRO1001398 5'
8878	18690	28982	2.57	0.0E+00	11435244	NT	wz91h01.x1 NCL_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2566225 3' similar to WP:F53H10.2
							CE11040 ZINC FINGER, C2H2 TYPE;
							7h22b10.x1 NCL_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:3316699 3' similar to TR:Q13458 Q13458
							TRIO.;
							MR4-ST0118-261099-012-b03 ST0118 Homo sapiens cDNA
							MR4-ST0118-261099-012-b03 ST0118 Homo sapiens cDNA
							Homo sapiens KIA00247 gene product (KIA00247), mRNA

Page 411 of 413  
Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8878	18690	28983	2.57	0.0E+00	11435244	NT	Homo sapiens KIAA0247 gene product (KIAA0247), mRNA
8883	18694	28987	5.52	0.0E+00	U36253.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 5
8885	18696	28989	2.04	0.0E+00	BE379254.1	EST_HUMAN	601237691F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609623 5'
8885	18696	28990	2.04	0.0E+00	BE379254.1	EST_HUMAN	601237691F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609623 5'
8896	16272	26434	63.21	0.0E+00	AA211683.1	EST_HUMAN	zn5602.r1 StrataGene muscle 937209 Homo sapiens cDNA clone IMAGE:562203 5' similar to gb:X03740
8900	15883	26006	4.08	0.0E+00	AW505430.1	EST_HUMAN	MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
8902	18710	29005	3.25	0.0E+00	BE794758.1	EST_HUMAN	UI-HF-BND-ama-c-01-0-JL1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3081217 5'
8903	18711	29006	37.53	0.0E+00	BE796333.1	EST_HUMAN	601590588F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944708 5'
8904	18712	29007	2.93	0.0E+00	M60676.1	NT	601491821F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3894220 5'
8915	18723	29014	6.35	0.0E+00	BE409893.1	EST_HUMAN	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
8916	18724	29015	1.93	0.0E+00	11427345	NT	601299403F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3629544 5'
8916	18724	29016	1.93	0.0E+00	11427345	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2), mRNA
8916	18724	29017	1.93	0.0E+00	11427345	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2), mRNA
8917	18725	29018	2.32	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8917	18725	29019	2.32	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8919	18727	29020	5.66	0.0E+00	BF681641.1	EST_HUMAN	602155722F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4296725 5'
8919	18727	29021	5.66	0.0E+00	BF681641.1	EST_HUMAN	602155722F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4296725 5'
8924	18732	29026	3.22	0.0E+00	BE903372.1	EST_HUMAN	601676357F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3958935 5'
8933	18741	29034	6.15	0.0E+00	BF312552.1	EST_HUMAN	601897624F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4127069 5'
8933	18741	29035	6.15	0.0E+00	BF312552.1	EST_HUMAN	601897624F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4127069 5'
8934	18742	29036	3.02	0.0E+00	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
8934	18742	29037	3.02	0.0E+00	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
8964	19475		20.36	0.0E+00	BF309120.1	EST_HUMAN	601890534F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131416 5'
8965	18771	29062	1.98	0.0E+00	BE698861.1	EST_HUMAN	RC4-NN0025-120600-016-b07 NN0025 Homo sapiens cDNA
8965	18771	29063	1.98	0.0E+00	BE698861.1	EST_HUMAN	RC4-NN0025-120600-016-b07 NN0025 Homo sapiens cDNA
8969	18775	29066	31.56	0.0E+00	BE297175.1	EST_HUMAN	601177407F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532968 5'
8981	18786	29076	36.47	0.0E+00	7669505	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
8981	18786	29077	36.47	0.0E+00	7669505	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
8982	18787	29078	34.29	0.0E+00	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
8987	18792	29081	31.52	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #936215. Homo sapiens cDNA clone 77E12

Page 412 of 413  
Table 4  
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8987	18792	29082	31.52	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #836215, Homo sapiens cDNA clone 77E12
9000	18803	29096	7.35	0.0E+00	U84744.1	NT	Human Chediak-Higashi syndrome protein short isoform (LYST) mRNA, complete cds
9002	18805	29098	92.9	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
9017	19747	24893	2.54	0.0E+00	BE312542.1	EST_HUMAN	601150023F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503020 5'
9031	19594		2.67	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
9033	19605		3.43	0.0E+00	AI190993.1	EST_HUMAN	qet7b12.x1 Scores_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1739231 3'
9043	18829		2.24	0.0E+00	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
9062	18843		2.2	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
9071	18849		2.73	0.0E+00	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
9090	18864		5.48	0.0E+00	5802973	NT	Homo sapiens antioxidant protein 1 (AOP1), nuclear gene encoding mitochondrial protein, mRNA
9123	19563	25066	1.63	0.0E+00	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
9133	19871		2.82	0.0E+00	AL041931.1	EST_HUMAN	DKFZp434K0819_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434K0819 5'
9158	19711		3.07	0.0E+00	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
9167	18910		4.39	0.0E+00	AL046544.1	EST_HUMAN	DKFZp434G218_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G218 5'
9180	19610		2.36	0.0E+00	AI903497.1	EST_HUMAN	IL-BT030-271098-001 BT030 Homo sapiens cDNA
9218	19732		1.3	0.0E+00	N54484.1	EST_HUMAN	y40e08.s1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:245222 3' similar to SW:POL_BAEVM P10272 POL POLYPROTEIN ;
9233	19952		3.36	0.0E+00	AF106656.1	NT	Homo sapiens adenylosuccinate lyase gene, complete cds
9236	10752	20601	3.21	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
9236	10752	20602	3.21	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
9246	19612		2.75	0.0E+00	10092587	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 (NFATC2), mRNA
9276	10477		2.7	0.0E+00	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
9309	19412	25183	2.48	0.0E+00	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
9370	19544	25064	3.23	0.0E+00	AW590082.1	EST_HUMAN	hg31e06.x1 NCL_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2947234 3' similar to contains Alu repetitive element; contains element MER22 repetitive element ;
9382	19595		1.61	0.0E+00	BE090210.1	EST_HUMAN	RC6-BT0711-290300-011-D05 BT0711 Homo sapiens cDNA
9426	19607		2.33	0.0E+00	AF068757.1	NT	Homo sapiens somatostatin receptor subtype 3 (SSTR3) gene, 5' flanking region and partial cds
9461	19092		1.56	0.0E+00	9635487	NT	Human endogenous retrovirus, complete genome
9498	19600		1.59	0.0E+00	AI204914.1	EST_HUMAN	an05h04.x1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:1684759 3'
9529	19136		1.58	0.0E+00	AI904646.1	EST_HUMAN	QV-BT065-020399-103 BT065 Homo sapiens cDNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9540	19596		1.68	0.0E+00	BE439792.1	EST_HUMAN	HTM1-654F HTM1 Homo sapiens cDNA
9551	11841	21724	1.98	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
9551	11841	21725	1.98	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
9571	19161	25267	2.33	0.0E+00	AF036365.1	NT	Homo sapiens caveolin-3 (CAV3) mRNA, complete cds
9584	11561	21426	2.87	0.0E+00	H30132.1	EST_HUMAN	yo59e08.r1 Soares breast 3NbhBst Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64099 GAMMA-GLUTAMYLTRANSEPTIDASE 5 PRECURSOR (HUMAN);
9584	11561	21427	2.87	0.0E+00	H30132.1	EST_HUMAN	yo59e08.r1 Soares breast 3NbhBst Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64099 GAMMA-GLUTAMYLTRANSEPTIDASE 5 PRECURSOR (HUMAN);
9597	19179		32.21	0.0E+00	D50659.1	NT	Human gamma-cytoplasmic actin (ACTGP9) pseudogene
9599	19181	25244	3.99	0.0E+00	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
9599	19181	25245	3.99	0.0E+00	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
9685	19239	25214	5.21	0.0E+00	BE246780.1	EST_HUMAN	TCBAP-1E4466 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4466
9692	15089	24829	1.64	0.0E+00	8922593	NT	Homo sapiens hypothetical protein FLJ10697 (FLJ10697), mRNA
9698	19249		2.39	0.0E+00	11526291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
9721	15092	24896	3.19	0.0E+00	4885312	NT	Homo sapiens G protein-coupled receptor 24 (GPR24), mRNA
9734	19269		2.21	0.0E+00	AB029900.1	NT	Homo sapiens CST gene for cerebroside sulfotransferase, exon 1, 2, 3, 4, 5
9773	19291	25233	1.5	0.0E+00	9558724	NT	Homo sapiens cleavage and polyadenylation specific factor 1, 160kD subunit (CPSF-1), mRNA
9794	19757		2.79	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
9800	10546	20354	1.41	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
9878	19364		2.13	0.0E+00	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
9913	19388	25177	2.42	0.0E+00	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
9938	19407		1.51	0.0E+00	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
9946	19621		1.29	0.0E+00	11434874	NT	Homo sapiens oxytocin receptor (OXTR), mRNA
9966	19591		1.56	0.0E+00	BE177449.1	EST_HUMAN	RC1-H10595-200400-012-412 HT0595 Homo sapiens cDNA
9971	19431		1.28	0.0E+00	AL048911.1	EST_HUMAN	DKFZp434J0618_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434J0618

## CLAIMS

1. A spatially-addressable set of single exon nucleic-acid probes for measuring gene expression in a sample derived  
5 from human heart comprising a plurality single exon nucleic probes, said probes comprising any one of the nucleotide sequences set out in SEQ ID NOs: 1 - 9,980 or a complementary sequence, or a portion of such a sequence.
- 10 2. A spatially-addressable set of single exon nucleic acid probes as claimed in claim 1 wherein each of said plurality of probes is separately and addressably amplifiable.
3. A spatially-addressable set of single exon nucleic acid  
15 probes as claimed in claim 1 wherein each of said plurality of probes is separately and addressably isolatable from said plurality.
4. A spatially-addressable set of single exon nucleic acid  
20 probes as claimed in any of claims 1 to 3 wherein said probes comprise any one of the nucleotide sequences set out in SEQ ID NOS.: 9,981 - 19,771.
5. A spatially-addressable set of single exon nucleic acid  
25 probes as claimed in any of claims 1 to 4, wherein each of said plurality of probes is amplifiable using at least one common primer.
6. A spatially-addressable set of single exon nucleic acid  
30 probes as claimed in any of claims 1 to 5 wherein the set comprises between 50 - 20,000 single exon nucleic acid probes.
7. A spatially-addressable set of single exon nucleic acid  
35 probes as claimed in any of claims 1 to 6, wherein the



average length of the single exon nucleic acid probes is between 200 and 500 bp.

8. A spatially-addressable set of single exon nucleic acid probes as claimed in any of claims 1 to 7, wherein at least 50% of said single exon nucleic acid probes lack prokaryotic and bacteriophage vector sequence.

9. A spatially-addressable set of single exon nucleic acid probes as claimed in any of claims 1 to 8, wherein at least 50% of said single exon nucleic acid probes lack homopolymeric stretches of A or T.

10. A spatially-addressable set of single exon nucleic acid probes as claimed in any of claims 1 - 9 characterised in that said set of probes is addressably disposed upon a substrate.

11. A spatially-addressable set of single exon nucleic acid probes as claimed in claim 10 wherein said substrate is selected from glass, amorphous silicon, crystalline silicon and plastic.

12. A microarray comprising a spatially addressable set of single exon nucleic acid probes as claimed in any of claims 1 - 11.

13. A single exon nucleic acid probe for measuring human gene expression in a sample derived from human heart comprising a nucleotide sequence as set out in any of SEQ ID NOs.: 1 - 9,980 or a complementary sequence or a fragment thereof wherein said probe hybridizes at high stringency to a nucleic acid molecule expressed in the human heart.

35

14. A single exon nucleic acid probe as claimed in claim 13 comprising a nucleotide sequence as set out in any of SEQ ID NOs.: 9,981 - 19,771 or a complementary sequence or a fragment thereof.

5

15. A single exon nucleic acid probe for measuring human gene expression in a sample derived from human heart which is a nucleic acid molecule having a sequence encoding a peptide comprising a peptide sequence as set out in any of  
10 SEQ ID NOs.: 19,772 - 29,119, or a complementary sequence or a fragment thereof wherein said probe hybridizes at high stringency to a nucleic acid expressed in the human heart.

16. A single exon nucleic acid probe as claimed in any one  
15 of claims 13 to 15 wherein said single exon nucleic acid probe comprises between 15 and 25 contiguous nucleotides of said SEQ ID NO.

17. A single exon nucleic acid probe as claimed in any one  
20 of claims 13 to 15, wherein said probe is between 3 - 25 kb in length.

18. A single exon nucleic acid probe as claimed in any one of claims 13 - 17, wherein said probe is DNA, RNA or PNA.

25

19. A single exon nucleic acid probe as claimed in any one of claims 13 - 18, wherein said probe is detectably labeled.

30 20. A single exon nucleic acid probe as claimed in any one of claims 13 - 19, wherein said probe lacks prokaryotic and bacteriophage vector sequence.

21. A single exon nucleic acid probe as claimed in any one  
35 of claims 13 - 20, wherein said probe lacks homopolymeric

stretches of A or T.

22. A method of measuring gene expression in a sample derived from human heart, comprising:

5       contacting the microarray of claim 12, with a first  
          collection of detectably labeled nucleic acids,  
          said first collection of nucleic acids derived  
          from mRNA of human heart; and then  
          measuring the label detectably bound to each probe of  
10       said microarray.

23. A method of identifying exons in a eukaryotic genome, comprising:

          algorithmically predicting at least one exon from  
15       genomic sequence of said eukaryote; and then  
          detecting specific hybridization of detectably labeled  
          nucleic acids to a single exon probe,  
          wherein said detectably labeled nucleic acids are derived  
          from mRNA from the heart of said eukaryote, said probe is a  
20       single exon probe having a fragment identical in sequence  
          to, or complementary in sequence to, said predicted exon,  
          said probe is included within a microarray according to  
          claim 12, and said fragment is selectively hybridizable at  
          high stringency.

25

24. A method of assigning exons to a single gene, comprising:

          identifying a plurality of exons from genomic  
          sequence according to the method of claim 23; and  
30       then  
          measuring the expression of each of said exons in a  
          plurality of tissues and/or cell types using  
          hybridization to single exon microarrays having a  
          probe with said exon,  
35       wherein a common pattern of expression of said exons in

said plurality of tissues and/or cell types indicates that the exons should be assigned to a single gene.

25. A nucleic acid sequence as set out in any of SEQ ID  
5 NOS: 1 - 19,771 which encodes a peptide.

26. A peptide encoded by a sequence as set out in any of  
SEQ ID Nos: 1 - 19,771.

10 27. A peptide comprising a sequence as set out in any of  
SEQ ID Nos: 19,772 - 29,119.

1/10

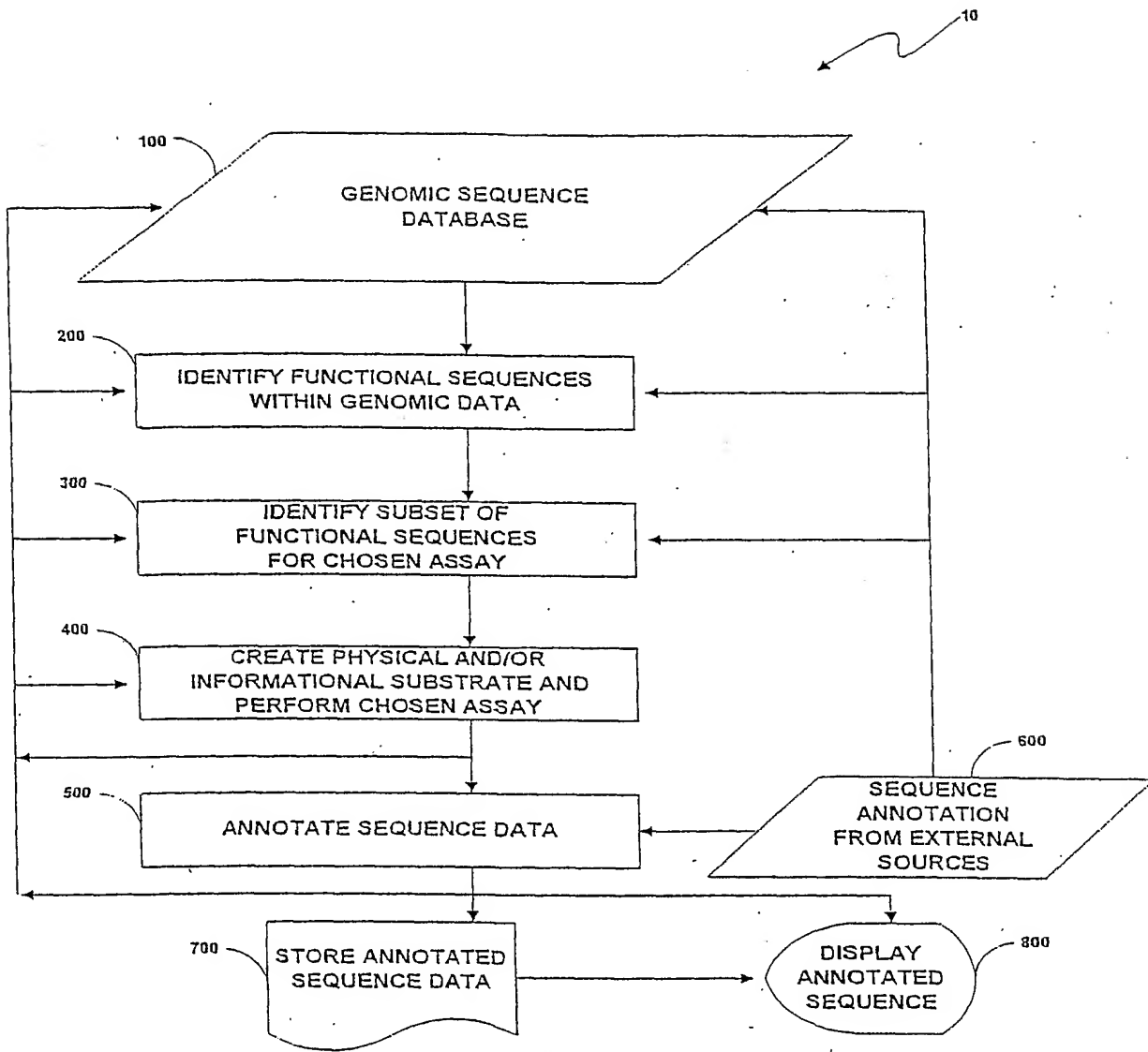


Fig. 1

2/10

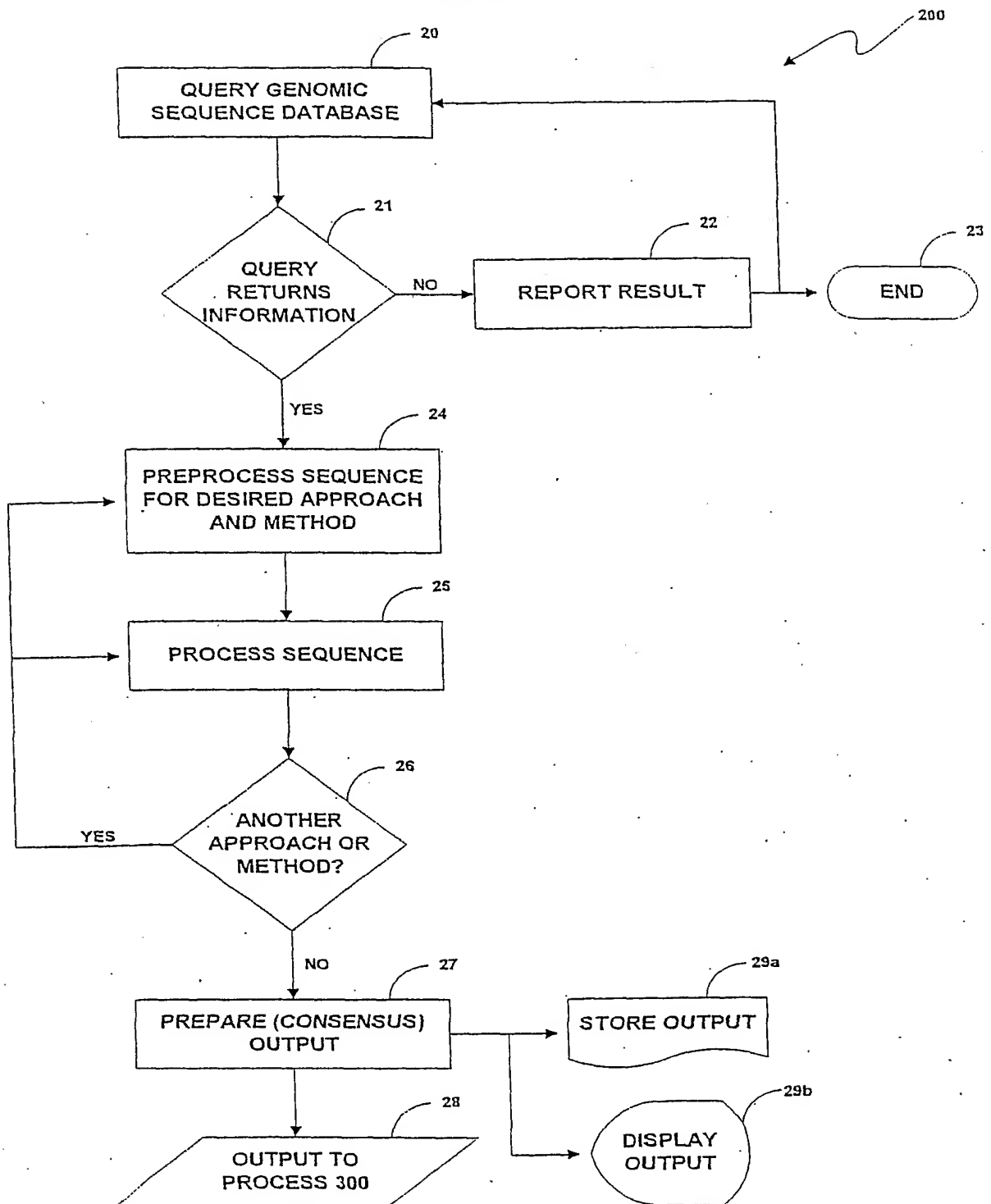


Fig. 2

3/10

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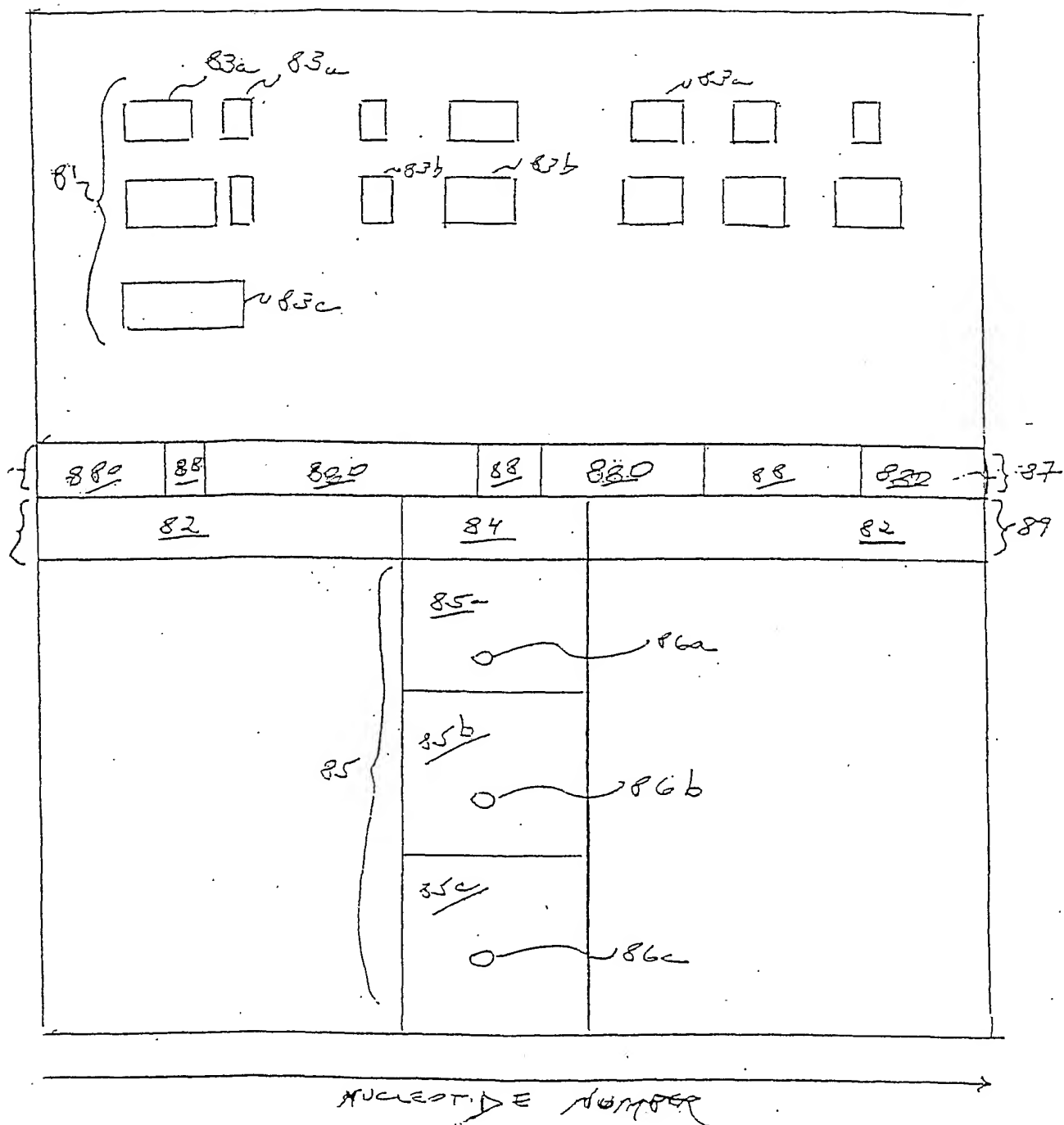


Fig. 3



4/10

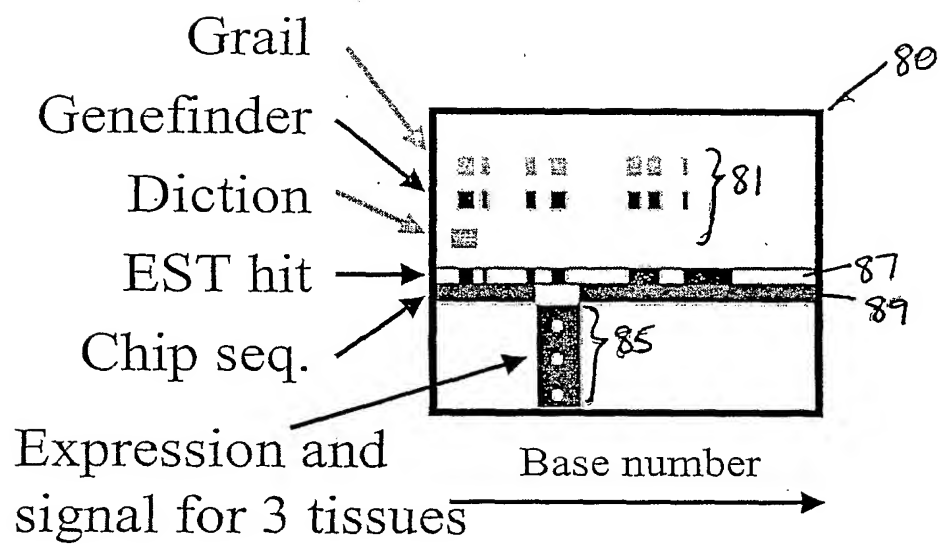


Fig. 4

5/10

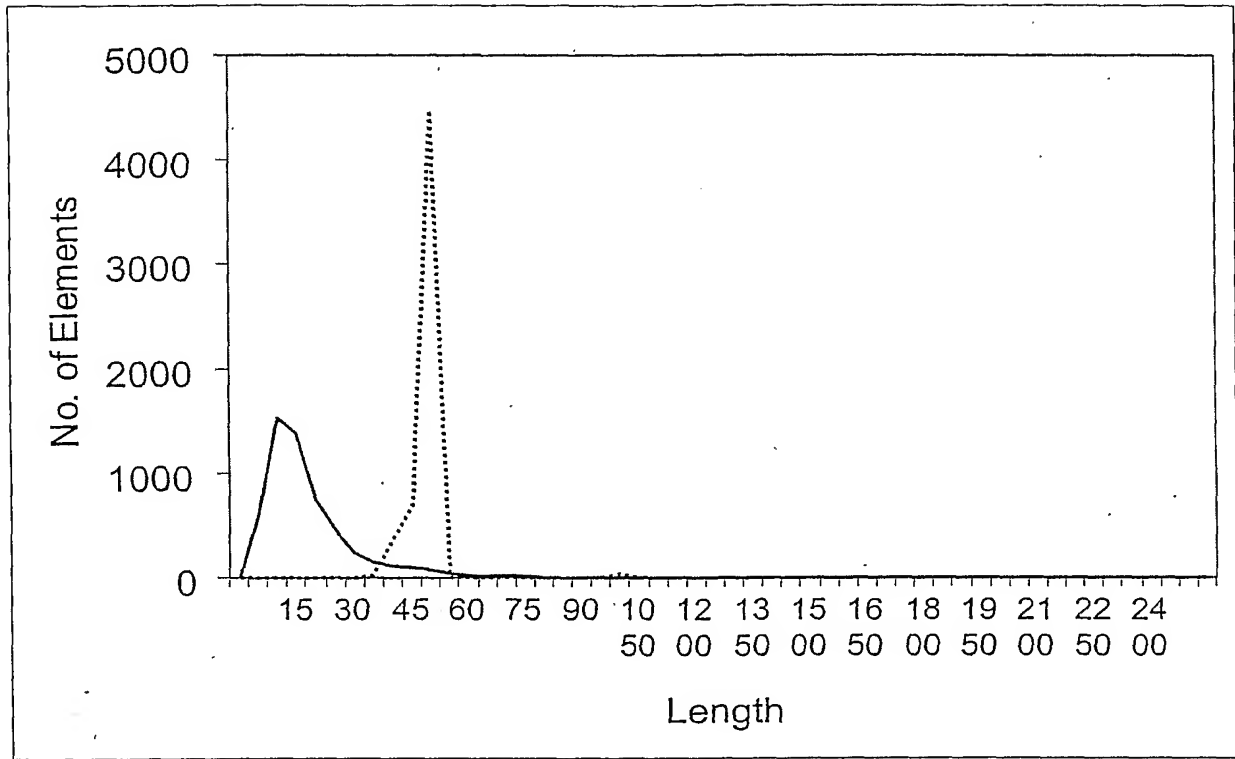


Fig. 5

6/10

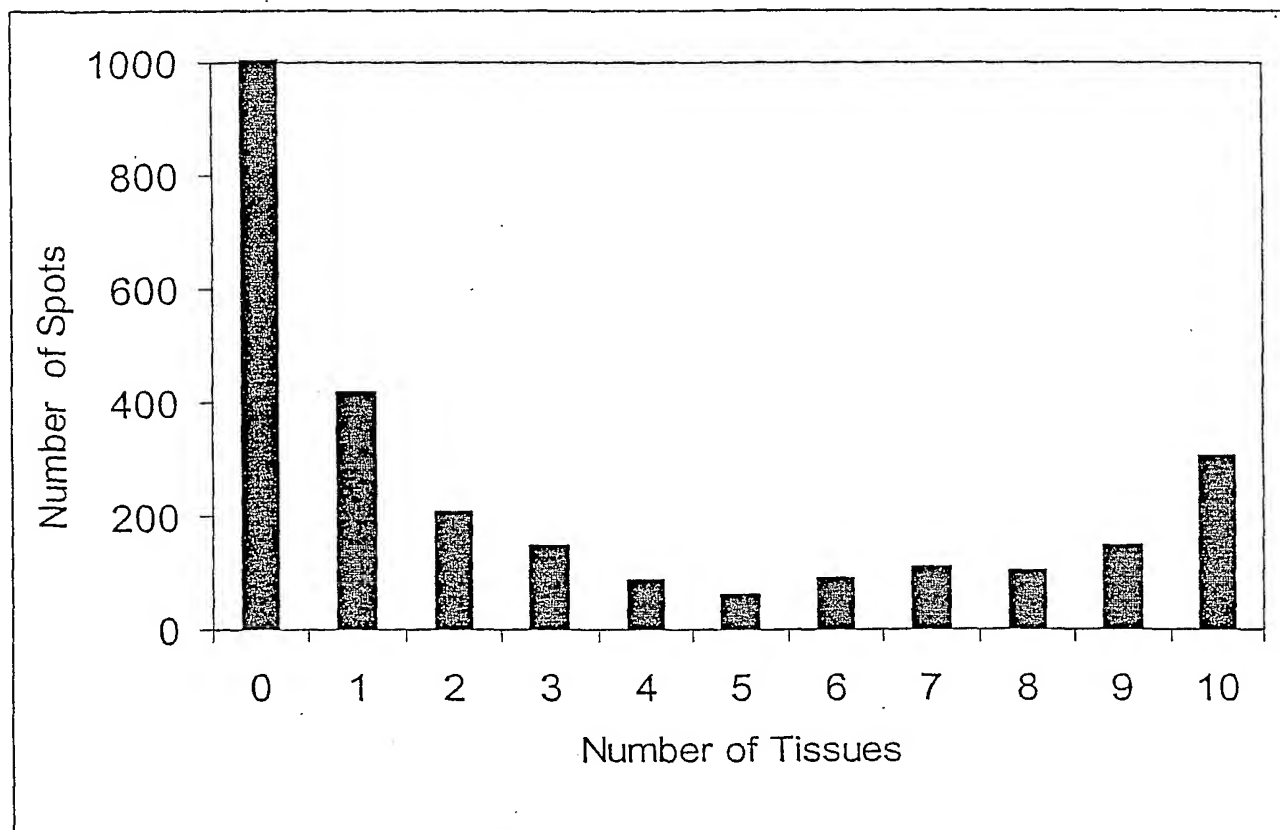


Fig. 6

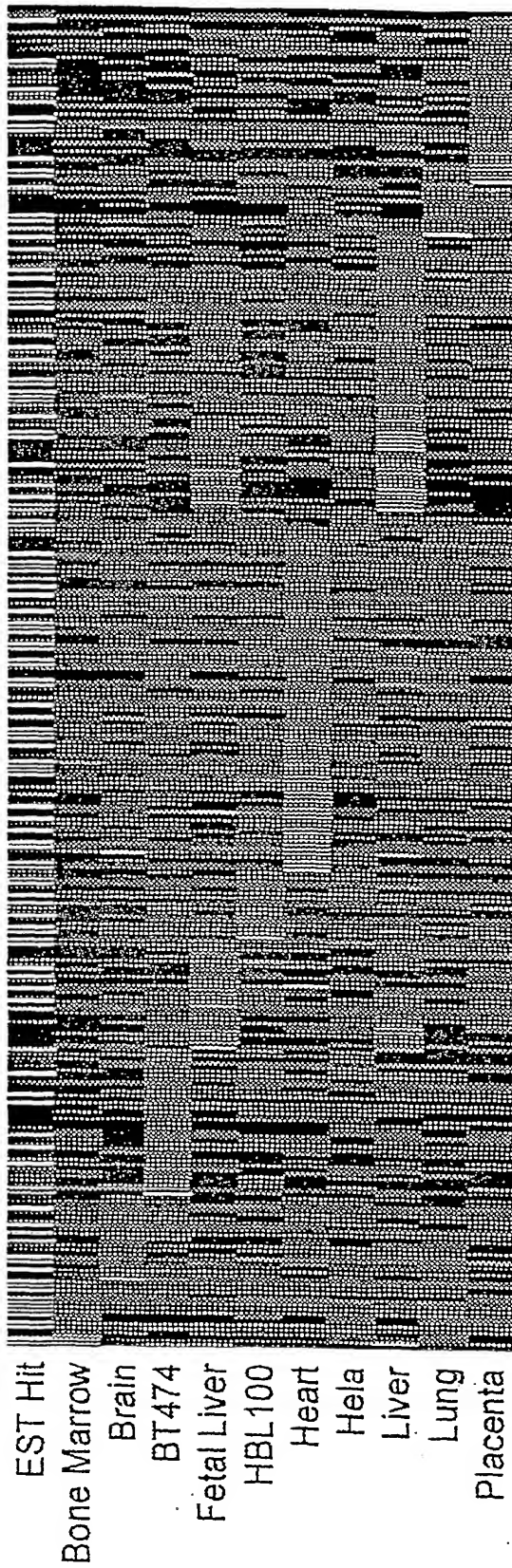


Fig. 7a

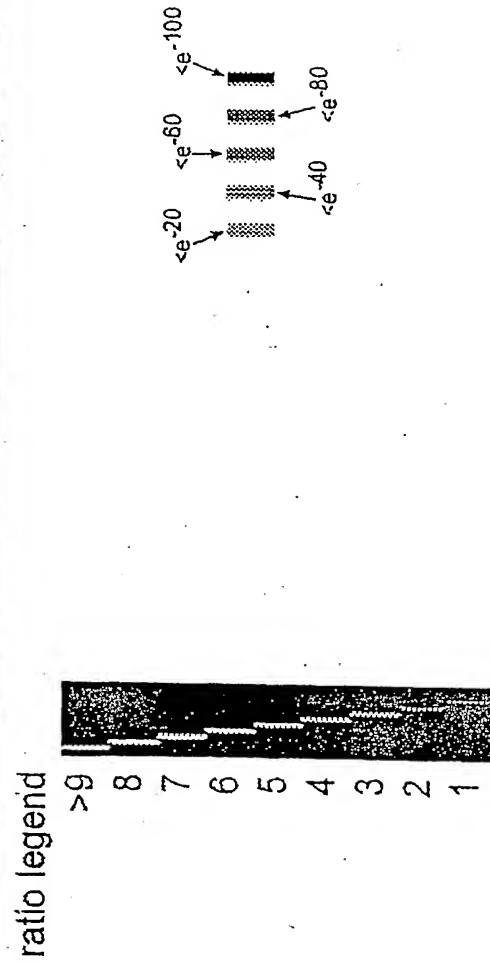


Fig. 7b

Fig. 7c

8/10

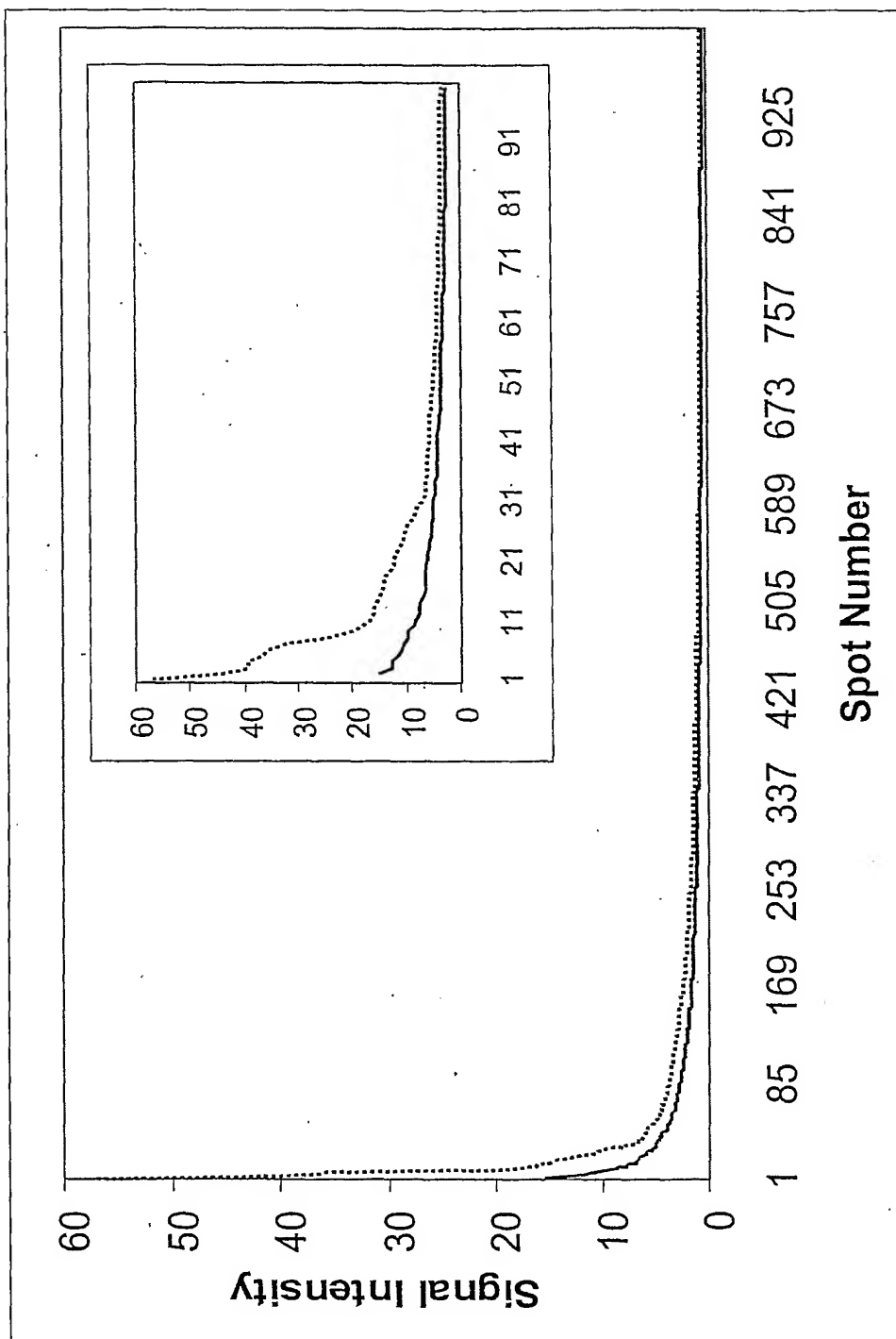


Fig. 8

9/10

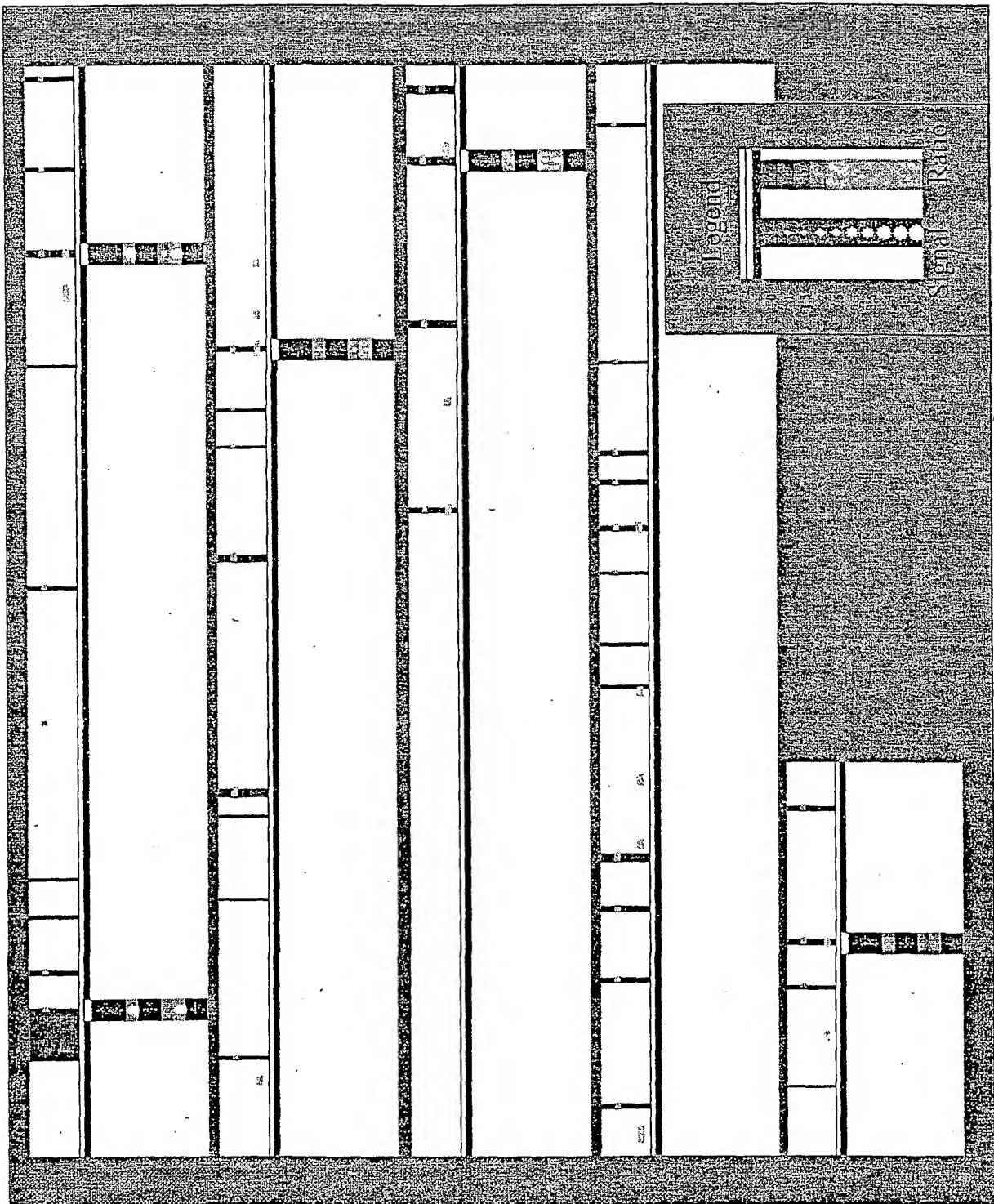


Fig. 9

10/10

Fig. 10

